TABLE 136

Motivations for companies producing specialized equipment or goods or services with specialized equipment, by industry: 2016–18 (Number and percent)

Industry	NAICS code	Companies (number)		To upgrade goods or services		To expand the range of goods or services	products to new		or		To adopt		Some other reason	
All industries	11, 21-23, 31- 33, 42-81	108,525		52.5		44.9	25.5	Ī	31.2		14.8		19.4	Ī
Manufacturing industries	31-33	13,962		53.0		51.2	34.6	Ť	43.1		11.6		14.3	
Food	311	535		41.9		32.1	9.7		16.6		11.8		24.3	
Beverage and tobacco products	312	108		35.2		66.7	19.4		22.2		8.3	r	13.9	
Textile, apparel, and leather products	313-16	273		60.4		30.8	10.6 r		14.3		9.9	r	22.7	
Wood products	321	278		74.8		48.6	14.4		28.1		3.2	r	11.2	: r
Paper	322	68		32.4	r	73.5	52.9 r		58.8	r	D		4.4	
Printing and related support activities	323	858		55.5		42.8	37.9		37.5		6.3		13.1	r
Petroleum and coal products	324	16	r	100.0		D	D		D		D		0.0	T
Chemicals	325	384		52.3		42.7	37.2		58.1		21.4	r	13.5	r
Pesticide, fertilizer, and other agricultural chemical manufacturing	3253	47	r	D		D	D		D		D		D	,
Pharmaceuticals and medicines	3254	77		48.1		37.7	32.5		45.5		15.6	r	13.0	r
Soap, cleaning compound, and toilet preparation manufacturing	3256	55		60.0		47.3	21.8		23.6	r	20.0	r	D	,
Other chemicals	other 325	206		42.2		31.1	30.1		64.1		6.8	r	18.0	ı
Plastics and rubber products	326	565		49.2		49.9	50.3		41.6		14.0	r	14.2	1
Nonmetallic mineral products	327	178		57.3		56.2	27.5 r		43.3		D		14.0	ı
Primary metals	331	114		40.4	r	16.7 r	16.7 r		20.2	r	D		7.0	1
Fabricated metal products	332	3,053		54.0		58.9	35.5		43.2		11.2		16.1	Т
Machinery	333	3,101		48.8		47.1	36.4		53.8		9.4		13.5	
Computer and electronic products	334	1,812		50.2		58.8	45.0		47.5		8.8		13.3	Т
Communications equipment	3342	228		46.5		62.7	45.2		64.0		6.6	r	12.3	1
Semiconductor and other electronic components	3344	319		43.6		59.2	33.9		43.3		11.6		19.7	
Navigational, measuring, electromedical, and control instruments	3345	1,109		52.0		60.2	48.2		42.8		9.2		11.7	
Other computer and electronic products	other 334	157		56.1		42.0	45.9		66.2		2.5	r	12.7	1
Electrical equipment, appliances, and components	335	419		57.0		53.2	43.9		55.1		11.0		8.6	'
Transportation equipment	336	493		42.6		41.8	18.9		28.2		18.7		23.5	-
Automobiles, bodies, trailers, and parts	3361-63	292		35.6		43.5	14.0		17.5		4.8		32.2	_
Aerospace products and parts	3364	108		69.4		50.9	40.7 r		55.6	r	20.4	r	15.7	1
Other transportation	other 336	93		35.5	r	26.9 r	8.6 r	_	28.0	r	59.1		D	-
Furniture and related products	337	350		58.0		63.4	34.3		37.1		8.6	r	10.3	_
Miscellaneous	339	1,360		66.3		53.8	29.8		37.6		19.3		10.5	1
Medical equipment and supplies	3391	608		83.1		56.1	46.1		49.7		26.6	r	4.4	
Other miscellaneous manufacturing	3399	751		52.7		52.1	16.9	1	27.8		13.2		15.3	1
Nonmanufacturing industries	11, 21-23, 42- 81	94,562		52.5		44.0	24.2		29.5		15.2		20.2	
Agriculture, forestry, fishing, and hunting	11	127	r	D		D	D		D		0.0		D	1
Mining, extraction, and support activities	21	345		50.4		33.0 r	2.6		19.7	r	7.2	r	21.2	_
Utilities	22	50		84.0		46.0	1 0.88		34.0		D		0.0	-
Construction	23	10,176		53.8		41.6	17.9	1	23.8		11.9		20.3	_
Wholesale trade	42	12,354		46.1		42.0	33.8		39.2		7.7		18.3	

TABLE 136

Motivations for companies producing specialized equipment or goods or services with specialized equipment, by industry: 2016–18 (Number and percent)

Industry	NAICS code	Companies (number)	To upgrade goods or services	To expand the range of goods or services	products to new	or	To adopt standards and accreditation		Some other reason	
Retail trade	44-45	10,704	47.9	45.7	27.0	29.4	11.6		16.1	
Transportation and warehousing	48-49	1,933	42.5	23.0	16.3	19.3	20.5		35.4	
Information	51	2,100	51.0	51.7	35.0	36.8	16.1		18.0	
Publishing	511	370	53.8	61.4	55.7	49.5	7.8		8.6	
Newspaper, periodical, book, and directory publishers	5111	89	62.9	47.2 r	55.1	53.9 r	D		14.6	
Software publishers	5112	280	50.7	66.1	56.1	48.2	8.9	r	6.4	
Telecommunications	517	444	40.5	50.2	23.4	22.5	6.1		26.8	
Data processing, hosting, and related services	518	474	57.0	57.2	41.8	47.7	16.7		24.5	
Other information	other 51	809	51.4	44.9	28.2	32.1	25.1		13.7	
Finance and insurance	52	1,276	51.8	30.5	28.0	47.3	19.8		17.7	
Real estate and rental and leasing	53	1,485	52.1	36.4	23.0	32.6	23.0	r	28.6	
Lessors of nonfinancial intangible assets (except copyrighted works)	533	0	0.0	0.0	0.0	0.0	0.0		0.0	
Other real estate and rental and leasing	other 53	1,485	52.1	36.4	23.0	32.6	23.0	r	28.6	
Professional, scientific, and technical services	54	18,044	56.6	52.5	33.4	37.5	18.6		15.5	
Legal services	5411	871	74.2	45.6	28.1	35.2	7.8	r	20.3	
Accounting, tax preparation, bookkeeping, and payroll services	5412	960	48.8	35.4	13.9 r	38.4	27.3		12.8	
Architectural, engineering, and related services	5413	5,304	50.5	45.9	27.2	34.0	13.5		21.9	
Specialized design services	5414	407	33.9	40.5	35.1	18.4 r	23.8		27.5	
Computer systems design and related services	5415	5,285	62.0	71.3	45.3	46.5	24.1		11.3	
Management, scientific, and technical consulting services	5416	2,124	52.8	44.2	32.8	34.6	18.0		11.9	
Scientific research and development services	5417	763	53.6	46.9	56.0	29.5	12.5		13.4	
Advertising, public relations, and related services	5418	456	62.1	52.2	44.5	31.8	12.1	r	16.0	
Other professional, scientific, and technical services	5419	1,871	63.3	44.8	18.3	34.9	21.8		10.9	
Management of companies and enterprises	55	D	0.0	0.0	D	D	0.0		0.0	
Administrative and support and waste management and remediation services	56	6,600	52.0	49.1	21.5	26.6	10.7		26.2	
Educational services	61	716	55.4	63.5	58.5	33.0	37.7		D	
Health care and social assistance	62	13,627	57.0	43.7	13.1	18.6	24.2		19.4	
Health care services	621-23	13,627	57.0	43.7	13.1	18.6	24.2		19.4	
Social assistance	624	0	0.0	0.0	0.0	0.0	0.0		0.0	
Arts, entertainment, and recreation	71	1,313	48.4	51.6	25.3	32.2	14.5	r	37.7	
Accommodation and food services Other services	72 81	4,252 9,406	47.6 55.9	31.7 37.4	13.5 17.0	22.3 26.5	12.7 13.5		33.7 21.6	

D = withheld to avoid disclosing data for individual companies; data are included in higher-level totals. r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

National Center for Science and Engineering Statistics | NSF 22-315

## Note(s)

Detail may not add to total because of rounding. Detail may exceed total because companies could select more than one response. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States.

## Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2019 Annual Business Survey: Data Year 2018.